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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,140	02/22/2002	Thomas Wyss	Rovema Case 27	8515
7590 03/16/2004 FLYNN, THIEL, BOUTELL & TANIS, P.C. 2026 Rambling Road Kalamazoo, MI 49008-1699			EXAMINER DURAND, PAUL R	
			ART UNIT 3721	PAPER NUMBER 17
DATE MAILED: 03/16/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,140

Applicant(s)

WYSS ET AL.

Examiner

Paul Durand

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 9-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 11, 12, 15-17, 21, 22 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 5, 10, 13, 14, 18-20 and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 15.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/6/04 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,4 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberto et al (US 5,562,581).

In regard to claim 1, Roberto discloses the invention as claimed including a magazine (not shown), removing device comprised of suction cups 23, supporting bar 25 and crank 26, an unfolding device comprised of roller 51, chute comprised of striker 53, output device comprised of gripping means 18, and expansion means comprised of conveyors 5,9 and 10, which fully open the blank 2 (see Figs. 2a, 2b, C3, L22-49 and C4, L5-7).

In regard to claim 4, Roberto discloses the invention as claimed including lugs 8,14 and 15, which are configured to align with a sidewall of partially opened blanks 2 (see Figs 2a, 2c and C6,L64 – C7,L3).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberto et al in view of Guttinger et al (US 5,91,078).

Roberto discloses the invention substantially as claimed including removing device comprised of suction cups 23, supporting bar 25 and crank 26. What Roberto does not disclose is the use of multiple removing arms and a planetary gear drive. However, Guttinger teaches that it is old and well known in the art of article handling to provide a article handling member comprised of arms 42 and suction cups 28, that are moved along a cycloidal path by the use of planetary gearing 70,72 and 74 for the purpose of moving an article efficiently through an operation (see Figs. 2,5-7,9,10 and C1, L28-33). Therefore, it would have been obvious at the time the invention was made to have provided the invention of Roberto with the article removal means as taught by Guttinger for the purpose of moving an article efficiently through an operation.

6. Claims 3 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberto et al in view of Dietrich et al (US 4,197,790).

In regard to claim 3, Roberto discloses the invention substantially as claimed including an unfolding device comprised of roller 51 (see Fig. 2b) to partially open a carton prior to placement on an exit conveyor. What Roberto does not disclose is the use of a compressing section comprised of a chute. However, Dietrich teaches that art is old and well known in the art to provide a box opening apparatus with a compressing section 5, comprised of a curved surface for opening a carton 2 before placement on forwarding conveyor 6 for the purpose of efficiently opening a box thereby increasing manufacturing throughput (see Fig. 1 and C2, L19-23). Therefore, it would have been obvious at the time the invention was made to have provided the invention of Roberto with the unfolding means as taught by Dietrich for the purpose of efficiently opening a box.

In regard to claim 15, Roberto discloses the invention substantially as claimed except for the use of an output device that is comprised of a conveyor. However, Dietrich teaches that art is old and well known in the art to provide an output conveyor 6, which is arranged after a folding chute 5 for the purpose of moving a box blank for further processing (see Fig.1). Therefore, it would have been obvious at the time the invention was made to have provided the invention of Roberto with the output means as taught by Dietrich for the purpose of moving a box blank for further processing.

In regard to claims 16 and 17, Dietrich discloses the invention substantially as claimed including expansion means comprised of conveyors 5,9 and 10, and lugs 8,14

and 15, which are configured to align with a sidewall of partially opened blanks 2 (see Figs 2a, 2c and C6,L64 – C7,L3).

7. Claims 9,11,12,21,22,24,25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberto et al in view of Dietrich et al and in further view of Mondani et al (US 5,715,657).

In regard to claims 9,11,12 and 21, Roberto discloses the invention substantially as claimed including a magazine (not shown) holding blanks 2, removing device comprised of suction cups 23, supporting bar 25 and crank 26, compressing section comprised of roller 51, chute comprised of striker 53, which receives the partially unfolded blanks, output device comprised of gripping means 18, and expansion means comprised of rotating conveyors 5,9 and 10, which fully open the partially unfolded blanks 2 (see Figs. 2a, 2b, C3, L22-49 and C4, L5-7). What Roberto does not disclose is the use of a plurality of arms for the removing device and a curved slide surface for partially unfolding the box. However, Dietrich teaches that art is old and well known in the art to provide a box opening apparatus with a compressing section 5, comprised of a curved surface for opening a carton 2 before placement on forwarding conveyor 6 (see Fig. 1 and C2, L19-23). Furthermore, Mondani teaches that it is old and well known in the art of box opening to provide an article handling comprised of multiple grippers 25 arranged with suction devices 55, that grip and partially unfold box blank 4, from feedbox 2 and prior to placement on conveyor unit 10 for the purpose of efficiently feeding and unfolding a stack of box blanks (see Fig. 1 and C3,L46-51). Therefore, it would have been obvious at the time the invention was made to have provided the

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invention of Roberto with the unfolding means as taught by Dietrich and the gripping means as taught by Mondani for the purpose of efficiently feeding and unfolding a stack of box blanks.

Furthermore, regarding the limitation of conveying the box blank at a specific force and velocity, the examiner takes official Notice that it old and well known in the art of conveying to provide control means to move an object through an operation at a preset constant velocity and force for the purpose of reducing damage to a product during the manufacturing operation. Therefore, it would have been obvious at the time the invention was made to have provided the invention of Roberto and Dietrich with the control means to move the box through the unfolding operation at a specific velocity and force for the purpose of reducing damage to a product.

In regard to claim 22, Roberto discloses the invention substantially as claimed including a removing device comprised of suction cups 23, which can function as a driving surface, supporting bar 25 and crank 26, with the surface being driven by shafts 20, which in turn is driven by rocking lever 43, idle roller 44 and pin 38, where the driving surface moves in respect to the orientation of the sidewall of blank 4 (i.e. it rotates with the blanks as the suction surface is engaged with the blank, see Fig. 2a).

In regard to claim 24, Roberto discloses the invention substantially as claimed including a first rotating device comprised of conveyor 5, provided at the expansion area (see Fig.2a and C3,L30-36).

In regard to claims 25 and 26, Roberto discloses the invention substantially as claimed including expansion means comprised of conveyors 5,9 and 10, and lugs 8,14

and 15, which are configured to align diagonally with a sidewall of partially opened blanks 2 (see Figs 2a, 2c and C6,L64 – C7,L3). Furthermore, in regard to the limitation that the conveyors operate at the same speed, the examiner takes Official notice that it is old and well known in the art to provide two conveyors to operate at the same speed for the purpose of reducing fully unfolded boxed from becoming partially unfolded thereby preventing defects. Therefore, it would have been obvious at the time the invention was made to have provided the invention of Roberto and Dietrich with expansion conveyors operating at the same speed for the purpose of reducing defects.

Allowable Subject Matter

8. Claims 5,10,13,14,18,19,20 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims 1-5 and 9-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 703-305-4962. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Durand
February 24, 2004



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700